

[0044] The method may further comprise choosing the images from the first images based on a comparison of the images.

[0045] The method may further comprise choosing the images from the first images based on an analysis of each first image.

[0046] The method may further comprise forming the second image from the chosen images using a super-resolution algorithm.

[0047] The second image may be a part of a sequence of images.

[0048] The sequence of images may comprise a video.

[0049] According to a third example aspect of the invention, there is provided a computer program, comprising:

[0050] code for performing a method of an example aspect of the invention,

[0051] when the computer program is run on a processor.

[0052] According to a fourth example aspect of the invention, there is provided a memory medium comprising the computer program of the third example aspect of the invention.

[0053] According to a fifth example aspect of the invention, there is provided a use of the apparatus of the first aspect, the method of the second aspect, the computer program of the third aspect and/or the memory medium of the fourth aspect in imaging.

[0054] Different non-binding example aspects and example embodiments of the present invention have been illustrated in the foregoing. The foregoing example embodiments are used merely to explain selected aspects or steps that may be utilized in implementations of the present invention. Some example embodiments may be presented only with reference to certain example aspects of the invention. It should be appreciated that corresponding example embodiments may apply to other example aspects as well.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0055] For a more complete understanding of example embodiments of the present invention, reference is now made to the following descriptions taken in connection with the accompanying drawings in which:

[0056] FIG. 1 shows a schematic principle view of a device comprising an apparatus according to an example embodiment;

[0057] FIG. 2 shows a block diagram of an apparatus of an example embodiment;

[0058] FIG. 3*a* shows a schematic side view of the principle of an apparatus according to an example embodiment;

[0059] FIG. 3*b* shows an example of images captured with an array of image sensors;

[0060] FIG. 4*a* shows a flow chart of an image forming method using an array of image sensors according to an example embodiment;

[0061] FIG. 4*b* shows a flow chart of a method of an example embodiment;

[0062] FIG. 5 shows a schematic principle view of an apparatus of an example embodiment;

[0063] FIG. 6 shows a flow chart of a method of a further example embodiment;

[0064] FIGS. 7*a* and 7*b* show a schematic principle view of an apparatus of an example embodiment; and

[0065] FIG. 8 shows a flow chart of a method of a further example embodiment;

#### DETAILED DESCRIPTION OF THE DRAWINGS

[0066] FIG. 1 shows a schematic principle view of a device 100, such as a mobile phone, gaming device, personal digital assistant, camera, tablet computer, laptop computer, computer monitor or television unit, comprising a display camera apparatus according to an example embodiment. The device 100 comprises a user interface unit 250 comprising, in an example embodiment, for example a touch sensitive display. Integrated with or into, herein after integrated with, the touch sensitive display 250 is an array of image sensors 240*a-f*. The image sensors 240*a-f* are in an example embodiment integrated with, for example situated under, the touch sensitive display 250 and capture an image through a displaying surface 220 of the touch sensitive display. A skilled person appreciates that the term integrated with encompasses any type of integration of the image sensor array 240—or any other element—with, into and/or to a further element. In an example embodiment, the device comprises further user interface elements 280, such as buttons, switches, microphones, speakers or keyboard elements. A skilled person appreciates that in a further example embodiment, the user interface unit alternatively comprises a display without touch sensitivity.

[0067] FIG. 2 shows a block diagram of an apparatus 200 of an example embodiment. The apparatus 200 comprises a processor 210, a user interface unit 250, a memory 260 and an input/output (I/O) interface 270 coupled to each other. The memory 260 comprises a work memory and a non-volatile memory such as a read-only memory, flash memory, optical or magnetic memory. In the memory 260, typically at least initially in the non-volatile memory, there is stored software 265 operable to be loaded into and executed by the processor 210. The software 265 may comprise one or more software modules and can be in the form of a computer program product that is software stored in a memory medium. The user interface unit 250 comprises a displaying surface 220, a touch sensor 230, or an array of touch sensors, and an image sensor array 240 integrated with the displaying surface 220. In an example embodiment, a lens or an array of lenses (not shown) is integrated with the array of image sensors 240 and/or with the displaying surface 220. In a further example embodiment, the lens or array of lenses is an adaptive lens or an array of adaptive lenses, comprising for example electronic liquid crystal lenses.

[0068] In an example embodiment, the displaying surface 220 is, or at least parts thereof are, transparent, so that the image sensor array 240, if located under the displaying surface 220, can capture an image through the displaying surface 220. In an analogous manner, the touch sensor 230 is, or parts thereof are, transparent. In an example embodiment, the displaying surface comprises a transparent indium tin oxide (ITO) layer. The displaying surface comprises a matrix of image forming elements, or display pixels, for generating light and forming an image on the displaying surface. The image forming elements comprise, for example, liquid crystals (LC) or organic light emitting diodes (OLED) or the like. In an example embodiment, the parts of the displaying surface between the display pixels are transparent.

[0069] In an example embodiment, the touch sensor 230 comprises a resistive, a surface acoustic wave, a capacitive—such as a surface capacitance, a projected capacitance, a mutual capacitance, or self-capacitance—an infrared, an optical, a dispersive signal and/or acoustic pulse recognition touch sensor or an array thereof.